

Modeling Cross-Cultural Motivational Processes of Japanese and U. S. Workers

Ikushi YAMAGUCHI

『日・米異文化動機づけプロセス実証研究
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モチベーションに関するこれまでのほとんどの研究は、欲求に対する満足度の「自己評価」からなされてきた。しかし、欲求に対する満足度は、「自己評価」のみから判断されうるのだろうか。いくら自分が、ある欲求に対して十分満足していると自己評価を下しても、同一環境内の他者の満足度と比較してみると、十分にその欲求満足が達成されていないと認識しなおすことがあるのではないか。逆に「自己評価」からは欲求満足を充足していないと判断しても、他者の満足達成度と比較すると十分満足できる水準にあると認識する場合もある。従って、一つの欲求に対する全般的な満足度は、「他者の満足度」との比較をもって判断されるのである。

本論文では、上記のことを示すモチベーション・プロセスのモデルとして、以下の式を提示し、将来行う予定の実証研究の理論構築をするものである。

全般的満足レベル（満足達成到達点）

= f（自己評価、他者の満足達成度との比較）

= f（自己評価、 $\frac{\text{他者の欲求満足達成レベル規準}}{\text{自己評価}}$ ）

= 満足達成のためになされる努力量

この「自己評価」と「他者の満足達成度との比較」の機能（f）から、その個人が一つの欲求に対する満足達成を実現するためには、今少し努力が必要なのか、それとも、もうそれ以上の努力は必要としないのかを判断することができるのである。すなわち、本研究では、全般的満足レベルを上記の式に適用して、努力必要量という変数に置換したモデルを構築するのである。

「欲求（Needs）」は、マズロー（1943,1954）の提唱した5つの欲求を改変し、Safety Needs → Social Needs → Social-esteem Needs → Self-esteem Needs → Self-actualization Needs という5つの段階的欲求変数として扱う。上記に提示したモデルに従って、これらの各欲求を達成するための必要努力量を測定するわけだが、文化が異れば、各欲求に対する「欲求の強さ」も

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異なるはずであるという仮定から、異文化の人々の間では、一番低位の Safety Needs から一番高位の Self-actualization Needs 達成までの全プロセスにおいて、その努力量に大きな相違があると予想される。以上のような理論から、本研究の目的は、日・米従業員の動機づけプロセスの相違を比較研究するためのモデルを構築し、そして、それを実証研究のための枠組として提示することである。

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Motivation is a kind of driving force that generates people's actions. If they do something or not depends on whether they need, want, or have to do it. Behavior takes place due to motivation of many kinds. For example, when a person is hungry, he/she begins looking for something to eat. If he/she can not find any food, he/she would need to buy some. If he/she has no money nor can potentially earn enough money to buy it, then he/she might be tempted to steal either money or food. Furthermore, in order to meet his need for food, an individual might even be so motivated as to murder a baker for bread if necessary. Whether or not a series of actions is to be taken hinges on each individual, and behind all the actions, there are always human motives, in the above case, the need to survive.

Desires for spiritual growth as well as for physical survival can also be driving forces which bring about people's behavior. Once people secure their survival (i.e., to satisfy basic physical needs), then they can afford to wish not only for survival but for better and more comfortable manners of living and pursue their own tastes for life. For instance, if they don't like a lonely life style (even though they could survive in society), they may get interested in making friends and, to make their lives more pleasant, choose only friends they genuinely like. They will also make efforts for being liked and understood by those friends and gaining trust from them. Maintaining such human relationships can be a condition for them to lead a sound social life. Those who have established a foundation of a good social life, in turn, may be motivated to do what they really like to do. They will be able to concentrate on pursuit and realization of their dream. In this case, needs which give rise to a series of behaviors are the motives to make their mind and spirit satisfied.

Thus, the level of human needs seems to be raised in an order phased from physical to spiritual needs as Maslow (1943, 1954) suggested. Physical needs can be humans' most basic motives in that survival is the minimum requirements for existence of human beings. Spiritual ones are more complex desires since it is not until people meet the physical needs of surviving that they begin to pursue the spiritual or more complicated needs.

For understanding motivation, a Need Satisfaction Model has been used as an almost universal one (Salancik & Pfeffer, 1977). This model is composed of three factors: needs, motives,

and satisfaction. These three factors have been intertwined in many theories of human behavior. Applied to the model, in an organizational setting, motivation is regarded as the results of relations between individual needs and job characteristics or working conditions (Salancik & Pfeffer, 1977).

Maslow (1943, 1954) and Alderfer (1969) studied motivation in terms of a satisfaction – performance link. Maslow divided human's basic needs into five categories and gave them a hierarchical order: from the most to the least basic needs there are (1) the physiological needs; (2) the safety needs; (3) the love needs; (4) the esteem needs; and (5) the needs for self – actualization. According to his theory, people are supposed to meet each need in the order stated above before they go on to the next higher need. Porter (1963) conducted empirical research on differences in importance of Maslow's needs (dependent variables) among employees with different age and organizational level (independent variable). He used five needs as dependent variables: the security needs, the social needs, the esteem needs, the autonomy needs, and the self – actualization needs. Alderfer (1969) presented three need categories: Existence, Relatedness, and Growth. (ERG) Alderfer and Schneider (1973) found some convergence between Maslow's five needs and Alderfer's ERG.

Hackman and Lawler (1971) and Herzberg, Mausner, and Synderman (1959) studied relations between higher – order need satisfaction and motivation/performance. Higher – order need satisfaction can be identified with a result of effective performance and also is seen as an incentive for continued efforts to perform effectively. For instance, Herzberg, Mausner, and Synderman (1959) divided human needs into two -- "higienes" and "motivators." Higienes factors are identical with Maslow's and Alderfer's lower level needs or extrinsic needs and "motivators" with Maslow's and Alderfer's higher level needs or intrinsic needs. There is numerous research on Herzberg's theory which discusses relations between higher – order or intrinsic needs satisfaction and workers' performance and/or motivation. Friedlander (1964), Ewen, Smith, Hulin and Lock (1966), Warnimont (1966), Center and Burgental (1966), and Adler (1980) carried out empirical research on Herzberg's two – factor theory of job satisfaction.

Kaln, et al. (1964) and Blauner (1964) explained relations between satisfaction and quality of working life: work can be a cause of tention, stress (Kaln, et al., 1964) and alienation (Blauner, 1964).

In addition to the above theories and research, some researchers have presented the relationships among motivational patterns, personal situations, and a process of individual socialization. For example, McClelland and Winter (1969) found that after receiving training for facilitating the need for achievement, businessmen increased their entrepreneurial behavior. It suggests that humans' motivational patterns can vary through their socialization. Wanous (1974) presented three methods for testing the correlation between job characteristics and specific job facet

satisfaction, overall job satisfaction, and job behavior. The three methods include urban vs. rural background, strong vs. weak belief in the "Protestant work ethic," and high vs. low strength for higher-order needs. He tried to elucidate relations between an individual's motivational pattern and his/her socialization.

These studies have provided much insight for study of motivational mechanisms in a cross-cultural setting in that they explain patterns of motivation which are different according to personal situations and experience received in an organization, a society and/or within a culture (Yamaguchi, 1991, 1993). Regarding this, Hui and Villareal (1989) presented correlation between Collectivist vs. Individualist cultural values and six psychological needs (abasement, affiliation, autonomy, nurturance, social recognition, desirability). They first divided both Chinese (from Hong Kong) and American subjects into two groups that have different cultural values (Collectivism vs. Individualism); then the correlations between Collectivism vs. Individualism and psychological needs were surveyed. This research implies the necessity and possibility for a study of motivational mechanisms of people with different cultural backgrounds. For another example, Church and Katigbak (1992) found Philippine and American college students attached different importance to academic motives.

As seen above, many researchers have suggested that the degree to which people are likely to satisfy human basic needs such as Maslow's five needs, Herzberg's two factors, McClelland's three needs and Alderfer's ERG needs also rest with their situations, socialization, and divergent cultural backgrounds. Regardless of whether their research was conducted cross-culturally or in a single culture, however, it has only focused on "relations" among job characteristics, importance of needs, and needs satisfaction, and people's behavior. Few studies have dealt with the "processes" of achieving overall satisfaction of human needs nor referred to comparisons between one's own needs satisfaction and that of potential counterparts with whom a person interacts in an organization and who affects his/her satisfaction achievement level. One person may have higher standards of satisfaction achievement level for some needs and lower for others, or, he/she may need and/or be willing to make more efforts and spend more time to achieve some needs than others. It is determined by comparing one's own satisfaction level with others'. Therefore, the objective of the present study is to build a theoretical model for conducting research on how a person achieves satisfaction of needs and if they need to make more or less efforts for the achievement in terms of the function of self - and other's standards of satisfaction achievement level of needs.

Mechanisms of Hierarchical Achievement

(1) Self – and social – evaluation of satisfaction

As suggested in the previous section, motivational processes are situational and various for persons and hence the amount of efforts made for satisfying needs may not be equal among them. The amount of efforts for achieving overall satisfaction of needs is a function of (1) self – evaluation of the achievement and (2) social – evaluation compared and relative to others' standards of satisfactory level of achievement. Most researchers have carried out research on motivation only in terms of self – evaluation of the achievement and failed to take social – evaluation of it into consideration. Merton's (1968) reference – group theory can explain a great influence of others' evaluation standard on self – evaluation of achievement level of satisfaction. As seen in "Soldiers case study" cited and illustrated by Merton (1968), a reference group can affect a person's own evaluation of his/her own behavior, attitudes and feelings as a frame of reference. Therefore, overall satisfaction of needs can not be fairly and correctly evaluated until it is compared with potential counterparts' standards of needs satisfaction achievement levels. Pennings (1964) conducted research on the correlation between Herzberg's two factors and job satisfaction in terms of reference – group behavior. He used promotion rates of subjects' organization as a factor which determines their reference group. He made the following hypothesis: "white collar workers at all levels in organizations with high promotion rates will refer to the intrinsically oriented job culture of the higher levels, whereas those with low promotion rates will refer to job culture of their peers, which is both intrinsic and extrinsic" (p. 398).

Yet, Pennings' study did not clarify how a reference group's standards of needs satisfaction achievement level can affect a process of achieving a person's overall satisfaction of needs. Although his research was novel in that he surveyed workers' values to needs in terms of a reference – group theory, he only suggested differences in the importance of intrinsic and extrinsic work values ascribed by employees with various promotion rates. The proposed research will go further and will measure people's overall satisfaction achievement of needs in comparison with that of potential counterparts (which is a concept of social – evaluation), and find the differences in the amount of efforts he/she may be required to make for achieving overall needs satisfaction.

An individual's satisfaction of needs reaches an achievement point as shown in the following formula:

$$\begin{aligned} \text{Overall Satisfaction Level} &= f(\text{Self – evaluation, Social – evaluation}) \\ (\text{Achievement point of satisfaction}) & \\ &= \text{the amount of effort made for satisfaction} \end{aligned}$$

where Social - evaluation is calculated by the formula of

$$\frac{\text{counterparts' standards of satisfaction achievement level of needs}}{\text{self - evaluation}}$$

Self - evaluation of achievement is measured by a person's own criteria of the satisfaction met only within his/her own mind (His/her own achievement standards are fixed by perceptual and value systems which his/her society has provided for him/her). Social - evaluation is measured by comparison between self - evaluation of achievement and others' or counterparts' standards of achievement satisfaction level of needs. Potential counterparts are assumed to be people and groups that a person encounters in a new environment and that have different perceptual and value systems from his/hers. The formula of

$$\frac{\text{counterparts' standards of satisfaction achievement level of needs}}{\text{self - evaluation}}$$

suggests that when self - evaluation itself is larger than counterparts' standards, the relation of self - evaluation > social - evaluation will come out, or vice versa. If there is the following relation concerning a certain need: self - evaluation > social - evaluation, satisfaction of the need is assumed to be attained well enough when overall evaluation of a person's satisfaction is made, although a person him - /herself isn't satisfied with the need in terms of his/her own self - evaluation. If an opposite relation is found, i.e., social - evaluation > self - evaluation, the need satisfaction will be thought of as unattained in determining overall satisfaction. That is, if his/her actual degree of achievement is higher than his/her counterparts' standards, then, he/she may be well enough satisfied with the achievement of needs, even though the level is not high in terms of self - evaluation, or vice versa.

Furthermore, according to the results of the formula, a person may try to control his/her own satisfaction by either lessening or increasing efforts for the achievement. When the result is self - evaluation > social - evaluation, a person will need less efforts to satisfy the needs. When it is social - evaluation > self - evaluation, he/she will be required to make still more efforts.

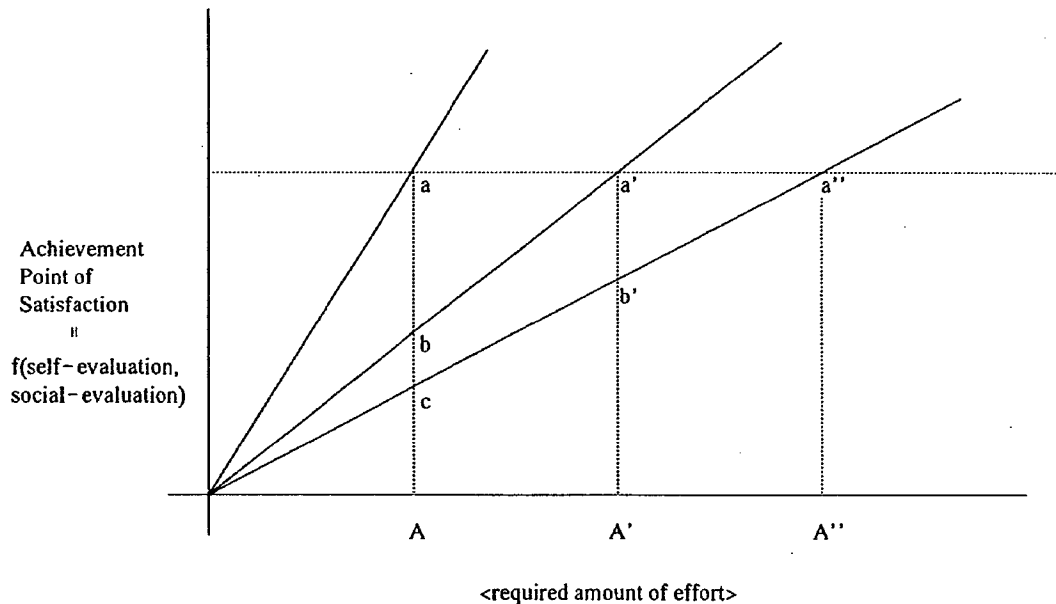
(2) Two kinds of Motives: Positive and Negative directions for Self - and Social - evaluation

In Figure 1, as the level of satisfaction is raised, a person has to increase the amount of effort for achieving satisfaction of needs. In other words, he/she may not reach the achievement point of satisfaction (point a, a', or a'') unless he/she makes enough effort to reach amount A, A' or A''. Until then, he/she is put in a process (point b, b', or c) where some psychological driving forces cross each other to achieve the overall satisfaction level. Point b, b' and c stand for situations where a person is only satisfied with achievement of needs in terms of his/her self - evaluation.

Driving forces that generate varying degrees of effort can be largely classified into the

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Figure 1. Overall Satisfaction Level and Varying Degrees of Effort



following two categories: a) positive (active) motives; and b) negative (passive) motives to form the level of self - and social - evaluation and then overall evaluation of satisfaction:

Self - evaluation

- a) positive (active): I am satisfied because I have achieved this level of need.
- b) negative (passive): I am not satisfied and need to make more effort because I have achieved only this level of need.

Social - evaluation

- a) positive (active): I am satisfied because I have found I have achieved a higher level of need than the level others or counterparts try to reach.
- b) negative (passive): I am not satisfied and need to make more effort because I have found I have not achieved as high a level of need as the level others or counterparts try to reach.

Thus, the overall human motivation as a social - being is found to be composed of four categories depending upon the directions (positive vs. negative).

The above clarification of psychological directions can be illustrated in Figure 2. Cell a is the most appropriate case in that both self - evaluation and social - evaluation function positively, and it is a situation where overall satisfaction of needs is achieved. Cell d is the least appropriate case because neither self - evaluation nor social - evaluation acts positively for the formation of

needs satisfaction even though progress toward it is made. Cell b is the case where a person's satisfaction is achieved through the following psychological workings:

- (1) His/her own performance is positively evaluated to have been achieved by his/her own criteria. But,
- (2) the same performance does not result in the socially positive evaluation because his/her satisfied level of performance is found to be lower than that of his/her counterparts with whom he/she interacts.

Cell c is the case in which this person makes the following judgment:

- (1) He/she is not satisfied by his/her own criteria, with his/her self performance. Yet,
- (2) He/she can be satisfied with it, relatively speaking, because he/she finds that his/her achievement level is higher than that of his/her counterparts.

It is assumed that a person tries to reach Cell a, the most appropriate combination of self – and social – evaluation, from the other three cells in order to achieve the motivation – satisfaction formula. The possible path to Cell a can therefore be classified into the following two cases:

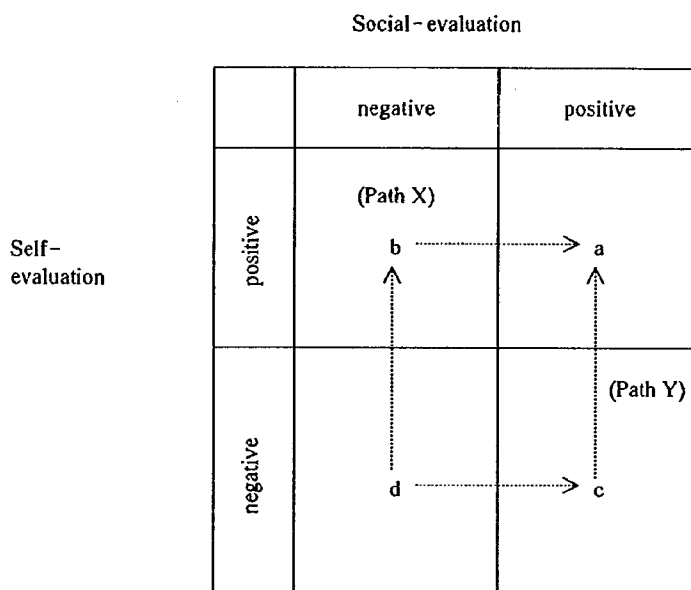
Path (X): Cell d -- > Cell b -- > Cell a

Path (Y): Cell d -- > Cell c -- > Cell a

Whether Path X or Path Y is chosen to reach Cell a depends upon both one's own and his/her counterparts' inclination to needs. If he/she is more oriented toward self – evaluation regarding some need, his/her priority may lie in the following order between Cell b and c: Cell b > Cell c. Therefore, this person tends to take Path X. In such a situation, he/she responds positively to the need in terms of self – evaluation but negatively in terms of social – evaluation. Positive self – evaluation to a certain need means that a person tends to lower the criteria for satisfaction of the need and hence the need is easy for him/her to achieve. The needs might not be regarded as crucial for him/her to motivate his/her action. If he/she is more oriented toward social – evaluation concerning another one, then Cell c > Cell b will result in Path Y. In this case, he/she makes a positive response to the need in terms of social – evaluation but a negative response to it in terms of self – evaluation. This situation suggests that a person goes through negative self – evaluation. Negative self – evaluation means that the person tends to value the importance of the needs rather high in terms of his/her view and hence his/her own criteria for achievement of satisfaction of needs are higher. As a result, the needs are difficult for him/her to satisfy. Any person is assumed to experience or take either Path X or Y in order for him/her to reach the satisfaction achievement level of a specific need as depicted in Figure 1.

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Figure 2. Psychological Directions for Self – & Social – evaluation



(3) Hierarchical Achievement of Needs

Maslow's needs model will be modified to use for analyses of "hierachical achievement" of needs for the present study. The physiological needs will be eliminated since these needs have much to do with human basic drives such as eating, sleeping and so on, and may be indispensable as a motivational factor for anybody with any kind of backgrounds to the same extent (Yamaguchi, 1991, 1993). The esteem – needs can be divided into two, and they are put between the social needs and the self – actualization needs: the "self – esteem" needs and the "social – esteem" needs (Yamaguchi 1991, 1993). The former is regarded as a concept close to the self – actualization needs since people should satisfy self – esteem before actualizing their own goals. The latter is assumed to be a concept close to the social needs in that people have to take others into consideration in any action and maintain good, positive relationships with others in order to obtain high esteem from others. Thus, there are five needs used for this study -- the safety needs, the social needs, the social – esteem needs, the self – esteem needs and the self – actualization needs.

"Hierarchical Achievement" suggests that when a person achieves progressively different needs, he/she is assumed to experience stepwise attainment of satisfaction of them in the following order as Maslow (1943) indicates: (1) the safety needs; (2) the social needs; (3) the social – esteem needs; (4) the self – esteem needs; (5) the self – actualization needs. Once achieving one need to the extent which a person is satisfied with it, he/she goes on to the next higher needs. Figure 3 illustrates the mechanisms of it. The vertical axis indicates an achievement point of each need, and the horizontal axis presents required amount of efforts. However, this hierarchical model of needs

does not suggest that everyone starts at 0 achievement point of needs. Satisfaction level of achievement surely varies with each person. 0 point in Figure 3 is the point where a person starts to "re - evaluate" his/her satisfaction achievement level of needs in terms of social evaluation. Thus, point A represents the amount of effort which he/she should make from the "re - evaluation" to overall satisfaction. Hence, if he/she has already reached the satisfaction achievement point of a need, a position of A will not move when he/she goes up to the need.

Motivational patterns A and B are the cases showing divergent motivational processes. They are significantly different in the amount of efforts made for reaching an achievement point of each need. For example, motivational pattern B makes much more effort to achieve the safety needs than pattern A, and pattern A endeavors more to satisfy the self - esteem needs than B. A and B expend the same amount of effort to achieve the social, the social - esteem, and the self - actualization needs in this example.

Frameworks for The Future Study

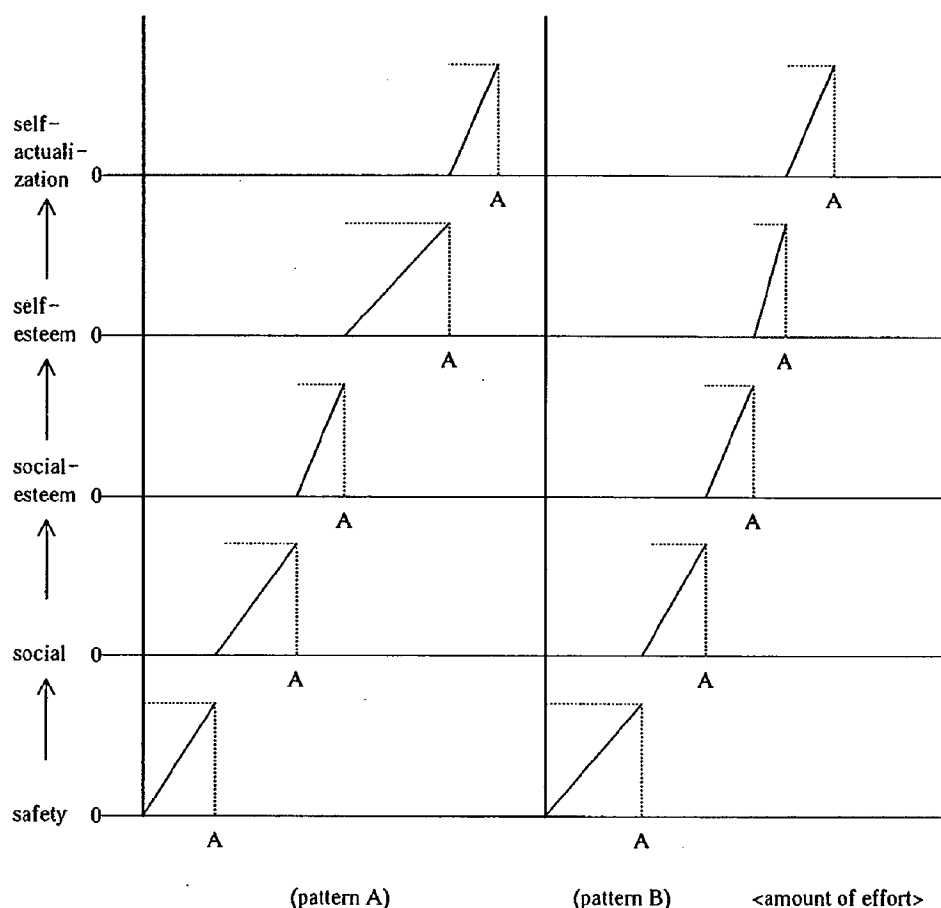
The model presented above will undergo empirical research for the author's doctoral dissertation, and the theory discussed above will be concluded as the result of the research in the dissertation. In this section, a framework for the research will be presented.

(1) The subjects for comparison in the proposed study

Research on the differences in motivational processes between Japanese and U.S. workers will be carried out. As mentioned earlier, a variety of motivational patterns lies with both people's socio - cultural backgrounds or their socialization and the situations where they are placed. In this study, therefore, the subjects will be categorized in terms of (1) socio - cultural background or socialization, and (2) situational factors as the framework of the research. One of the possible approaches toward analyses of the former (socio - cultural backgrounds or socialization) would be Hofstede's (1980) clarification of a cultural value system. He classified it into four dimensions: Power distance, Uncertainty avoidance, Individualism, and Masculinity. These four dimensions seem to be the most reliable and comprehensive variables for analyzing nominal scale of culture so far. Hofstede's (1980) dimensions will be used to analyze Japanese and American personal inclination toward needs. The latter (situations where workers are put) refers to a worker's position in a firm. Centers and Bugental (1966) found that intrinsic or extrinsic job components were related to occupational level: "at higher occupational levels, intrinsic job components (opportunity for self-expression, interest - value of work, etc) were valued. At lower occupational levels, extrinsic job components (pay, security, etc.) were more valued" (p. 193). Porter (1963) also found that employees in higher positions valued the self - actualization and the autonomy needs more strongly

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Figure 3. Stepwise Processes of Achievement of Needs



than those in lower occupational levels. Thus, a worker's position in a company is one of the most important factors affecting people's motivational patterns. Employees will be classified into three positional ranks for the study: managers, foremen, and rank and file workers. Accordingly, there are six kinds of subjects to be compared for this research: American managers (AM), Japanese managers (JM), American foremen (AF), Japanese foremen (JF), American rank and file workers (AR&F), and Japanese rank and file workers (JR&F).

(2) A factorial matrix of hierarchical achievement

This section will present a factorial matrix of self- and social- evaluation of satisfaction achievement of needs for the six different motivational patterns.

A factorial matrix can be made as shown in Figure 4. The vertical axis indicates self- evaluation of achievement of needs, and the horizontal axis refers to social- evaluation. Each axis is divided into two: a positive area and a negative area. A negative area indicates dissatisfaction

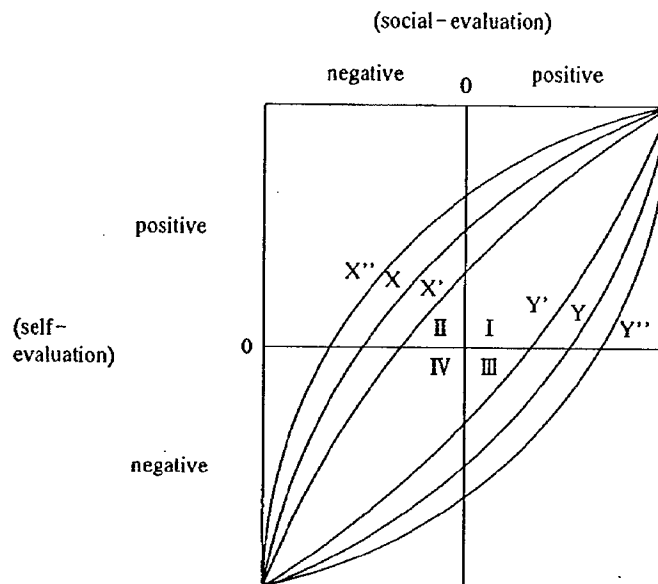
while a positive area implies satisfaction of needs. Workers are supposed to make efforts to reach quadrant I which is an achievement point of needs from IV through either II or III. The distance to the point, which could be shown by the curve line, illustrates whether a person is far or near from the achievement and if he/she should endeavor more or less to get there. As mentioned earlier, he/she will follow either Path X or Y. However, X and Y themselves can also change the routes to the achievement point. As illustrated in Figure 4, Paths X and Y may take routes X' or X'' and Y' or Y'', depending upon self - and social - evaluation of achievement of a particular need.

Thus, the proposed research will take the following two approaches for elucidation of the six motivational patterns:

- (1) to analyze the differences in the paths (X, X', X'', Y, Y', or Y'' in Figure 4) taken to reach an achievement point of needs between Japanese and Americans;
- (2) and then to analyze the differences in the amount of effort to achieve needs among six subjects.

Hypotheses on the above two approaches made from literature review are shown in Figure 5 and Figure 6 - 10.

Figure 4. A Factorial Matrix of Achievement of Needs



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Figure 5. Hypothetical Motivational Mechanisms of Six Different Groups

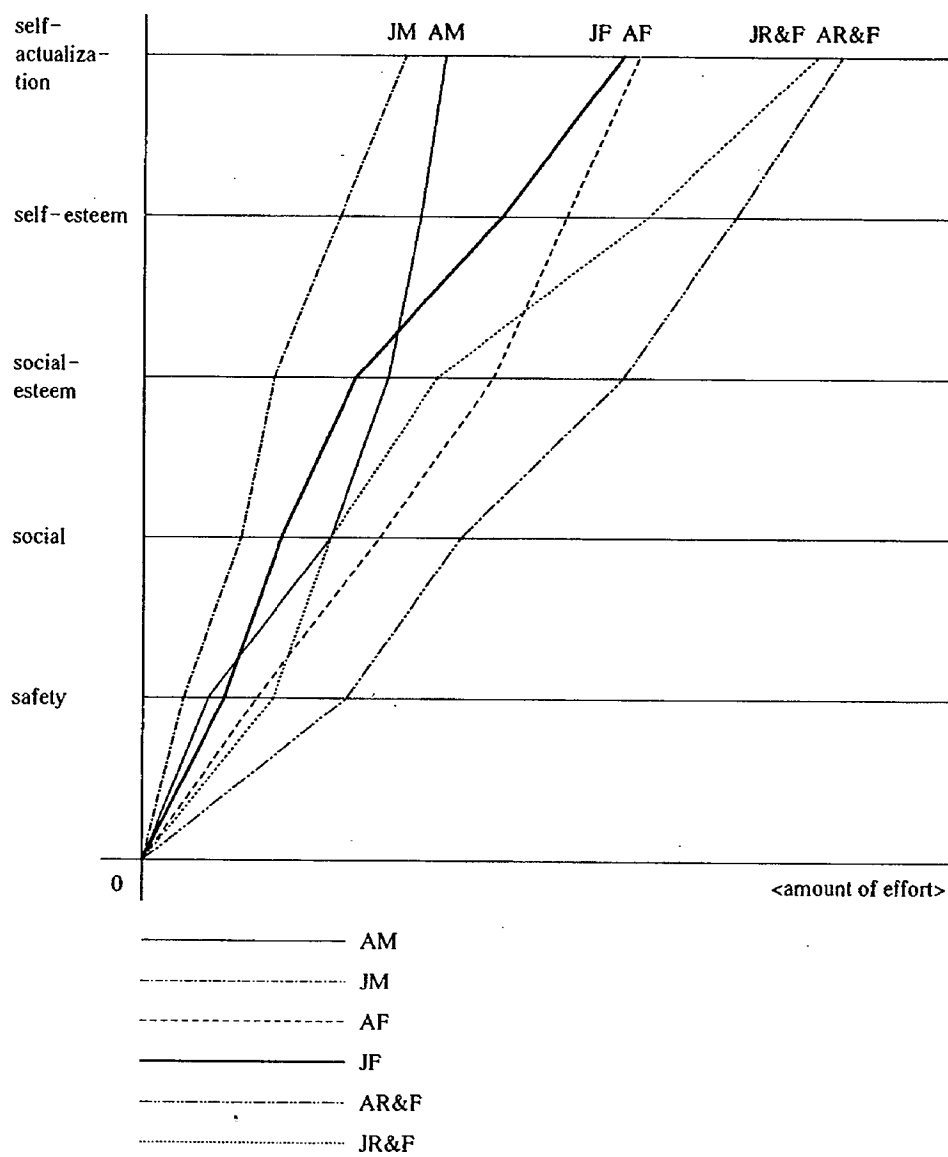


Figure 6. A Matrix of the Safety Needs

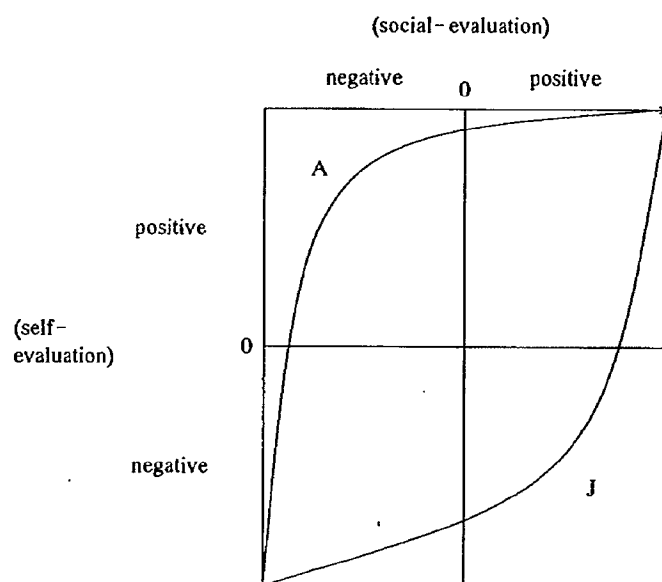
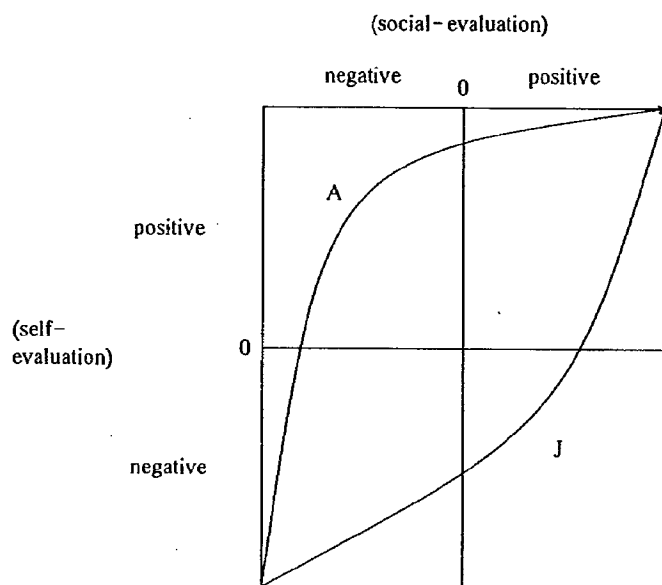


Figure 7. A Matrix of the Social Needs



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Figure 8. A Matrix of the Social – esteem Needs

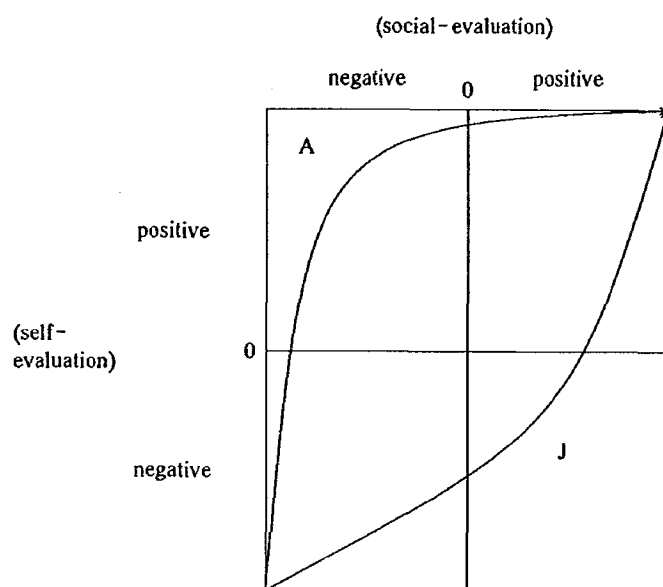


Figure 9. A Matrix of the Self – esteem Needs

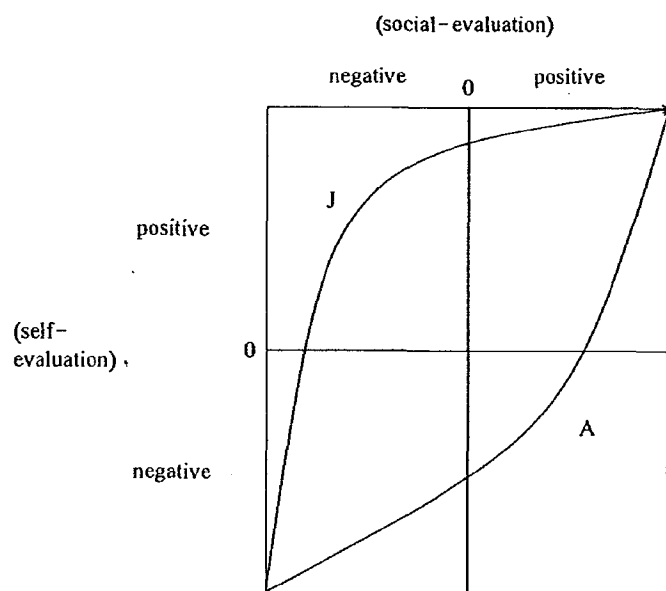
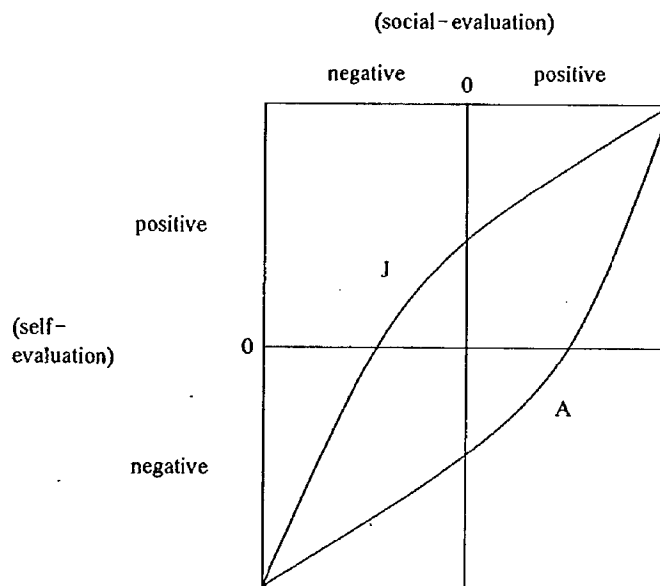


Figure 10. A Matrix of the Self - actualization Needs



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(やまぐち いくし)